Culver Mobility

www.culvermobility.com

Production License:

Food and Drug Regulatory Machinery Production License 20160061 Product registration certificate:

Machinery Registration 20202190553

IMPLEMENTATION STANDARD:

User Manual

PLease read the* manual carefully before *use

Product Technical Requirements number: Machinery Registration 20202190553

Table of contents

1. Intended use

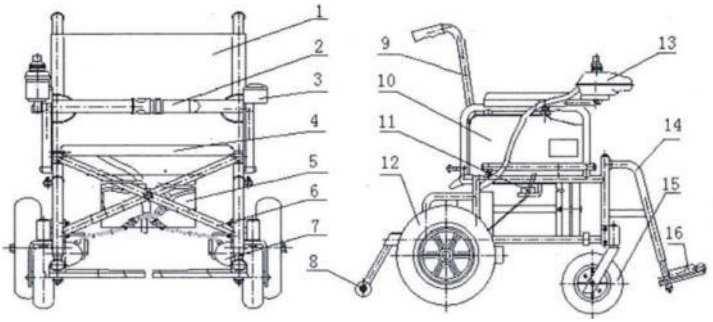
For people with disabilities or who can not walk properly (excluding obesity).

2. Type, specification and structure

®. The product model and de scription are shown i n the table below.

Model	Maximum user qua 1i t y	Driving form	Drive wheel d i ameter
ARTEMIS	120kg	rear-whee 1 drive	406mm (1600 hours)
	120kg	f ront-whee 1 drive	406mm (1600 hours)
	120kg	rear-whee 1 drive	559mm (2200 hours)

®. The structure of the wheelchair i s shown i n figure 1.



2 Seat belts 3 Handrails 4 Seat cushion

5 Batteries 6 Folding rack 7 Motor 8 Anti Rollover

9 Chair rack 10 Guard plate 11 Brake 12 Rear wheel

1 3 Control 1 er 14 Pedal frame 15 Front wheel 16 Foot pedal

Backrest

Fig. 1 schematic diagram of electric wheelchair structure 3. Main performance indicators

Maximum speed: W6kmh･

②.Running braking performance.

a) Horizontal Road Braking: Wl･5 M.

b) Maximum safe slope braking : W3. 6m (6°)

(3) . Slope Holding Capacity: 9 ° .

. Static stability: 39 ° .

(4) . Dynamic stability: 36 ° .

(5) . Obstacle Height :》40 mm

(6) .

©. Trench width: 100 mm.

®. Climbing capacity: N6 ° .

®. Minimum turning radius : 1200 mm.

⑩.Theoretical Distance: N10 km.

4. Primary function

Serial number	Funct i on	Account for
1	Stepless speed regulat ion	After the programmed speed adjustment, press forward 4 gears, back 1 gears control.
2	Controller overvoltage protection	Protect the controller in case of battery overpressure.
3	Motor blocking protection	The utility model can prevent the motor from overheat and damage when the obstacle i s blocked.
4	Insulation	The application part is connected with the live part, and the direct current between the two parts is W5mA.
5	Circuit protection	11 can protect the circuit from over-current of itself and externa 1 power supply.
6	Non-insulated electrical component protection	Ensure that the user is not exposed to non-insulated parts of the motor or burned.
7	The body of the chair is col 1aps i b1e	Easy to transport and store.
8	Anti-rollover wheel	Prevent wheelchairs from tipping over rough roads.
9	Electromagnet i c compat ibil i ty	11 can be used normally in electromagnetic environment wi thout causing electromagnetic disturbance to the environment.

5. Working Environment

① .Ambient temperature:-10 ° C ' 40 ° c;

② .Relative humidity: 25% ~ 95% ;

③ .Internal power supply: DC24V.

6. Installation and commissioning

The Electric Wheelchair has been debugged before it leaves the factory.

According to the transport requirements, part of the product factory parts used to break down packaging, so the user needs to be simple installation before use.

① .Open the electric wheelchair packing box, you can check the contents of the packing list in the information bag.

② .Pull the frame left and right to make the vehicle width normal, and press down on the seat to make the left and right brackets into grooves.

③ .Install the left and right foot pedal assembly, insert it down into the iron column and turn it forward until the positioning mechanism is locked; then loosen the screws at the bottom of the Pedal Assembly, adjust the pedal height to the proper position and re-tighten the screws (see figure below).

(4). Attach the controller to the bracket (FIG.)

⑤.Unscrew the outside of the battery case and read the Battery Connection Diagram on the inside of the battery case cover. There are two cables in the battery box, one side of the battery box is blue and black cable, the other side of the battery box is red and black cable. The battery has two wires, blue and red.

The connection method for the blue and BLACK CABLES IN THE BATTERY CASE IS:

The blue cable connects the red string, and the black cable connects the red string.

The Red and black cables in the BATTERY CASE ARE CONNECTED BY:

Red Cable to red string, black cable to blue string.

®. Check the clutch handle position of the motor, that is, the handle is " off" (manual position) when perpendicular to the wheel, and vice versa (see figure 4) . Note: There is no clutch device for the first speed reduction motor.

Figure 4

©. Observe the cable located at the 1 ower part of the vehic 1 e ; if the cable is found lying on the ground, use the attached strap bunching and lift it to a certain height (see figure 5).

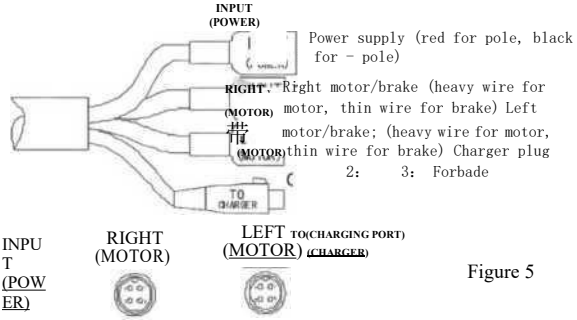


Figure 5

(§). Press the " power on" button to turn the power on, while "battery indicator" and fiquot;speed indicator" lights turned on. "Battery Display" light means the wheelchair the are power been turned on, the more light has means the more power, " speed level di sp1ay" light has a total of 1 ower speed limit five, full 1 ight speed, the less 1 ight the (see figure 6).

3 DECELERATION ADJUSTMENT SWITCH

4 Horn

5 speedometer

Fig. 6 controller function keys overlooking schematic diagram

Controller panel

Function description:

1 Battery Capacity Display

2 wheelchair power start switch

6 acceleration adjustment switch

(9). After the power is switched on, gent l y pull the controller lever in any direction to hear the electromagnetic clutch sound and the motor rotation sound in the motor mechanism. The speed of the motor increases with the increase of the range of the lever (the sound of the motor increases gradual l y) , and the speed of the motor (the sound of the motor) will change when the lever is turned left or right, and the lever is released, the e l ectromagnetic c l utch will release and make a noise, and the motor will stop.

⑩· Close the motor clutch handle (so that the hand l e is paral lei to the wheel) , the operator sits on the vehicle, turns on the power switch of the controller, and operates the vehicle, at whichtime the vehic1e moves with the

direction of the lever of the control ler. In order to avoid the damage of vehic1es, goods and peop1e caused by the operator ' s unskillful hand l ing of the vehic l es, it is necessary to choose a flat place with large space for the test run.

11、Press the rear tyre with your hand to check for adequate air pressure ; i f not, inflate i t immed i ate l y. Inflation can feel moderate ; not too much to avoid tire burst (inflation pressure rating of 40 Perth).

7. Method of use

For first~time users, low speed is recommended to avoid accidents due to unski lied operation.

®. Speed adjustment, the front of the controller joystick is the speed control button, the operator can according to their own adapted situation,

Adjust and determine the speed, press the left button (speed decrease button) for deceleration, press the right button (speed increase button) for acce1 erat i on. When the joystick returns to the middle posit ion, the car stops (see

figure 7).

8. Battery charging

（D. This product battery charging, power supply interlock, charging when the battery power supply plug out, the charger plug into the lower charging port of the control 1 er can be charged, (see photo)

01

Figure 7

When the vehicle is unable to drive electrically because of low electricity or other faults, the clutch can

Should use 24V, 8A fully automatic charger (recommended choice of Super Power Supply Co. , Ltd. .) , after full charge will automatical ly stop. I f the charging indicator on the charger is not turned green after the charging time exceeds 8 hours, it indicates that the battery has reached its life span and needs to be replaced.

Charging should be avoided in direct sunlight or high temperature environment; if the battery temperature exceeds 40 ° C, shou1d immediately stop charging. 11 is best to charge the vehic 1 e after each use, if you do not use this product for a period of time, you should take out the battery storage alone, long-term unused, to recharge once a month, strictly prohibited in the state of power loss storage.

9. Troub1e shooting This product will be through the controller LED lights flashing and horn sound to alert the abnormal state of the vehicle, according to the frequency and length of the alarm sound, can be based on the following table to determine the failure and timely removal. The following tab 1e describes the various audible warning states of the battery indicator and the speed/fault indicator.

Voice status	Implications	Processing prompt
All LED lights are off. No sound	Power off or on standby or system in s l eep mode. The power cord is not in good contact and the fuse is blown or blown	Check that the power cord and fuse are properly connected
Al 1 LED lights are lit.	The power* s on.The product can be used normal1y after seif-check.	—
Green light on power indicator	That means it' s fully charged.	—
The power indicator 1 ight turns yellow	11 means the battery is running at half capacity	11 should be considered that the journey should not be too far
Red Light on power indicator	It means we're running out of juice	The battery shou1d be recharged as soon as possible
Speed/first light b1inks	Indicates a fai lure of the left motor	The left motor is not in good contact or the cable is disconnected
Speed/second 1ight flashes	Indicates a fai lure of the right motor	The right motor is not in good contact or the cable is disconnected
Speed/fourth indicator light flashes	Indicates A joystick malfunction	The joystick is not reset or disconnected

10. Routine maintenance

©.The vehicle i s used i n normal temperature env i ronment; do not get wet to avoid short circuit.

2、 Shou 1 d of ten use a soft cloth to wipe, to keep the veh i c 1 e c lean, i f need to clean, can first scrub the surface with neutral detergent, then use a soft cloth dipped in clean water wipe, dry after use.

3、 The control 1 er and electric mechani sm are the core parts of the vehi c 1 e, so collision and damp shou1d be avoided.

4、 Check regularly whether the screws and nuts on the vehic1e are tightened, whether the electrical connector i s f al ling off, whether i t i s too close to the ground; if in doubt, ask the local dealer or call after-sales service to ensure safe driving.

5、 Pay attention to the vehicle shou1d be checked before each start whether the electricity is sufficient, so as not to give you out activities inconvenience.

6、Check the tire pressure regularly to ensure the normal use of the vehic 1 e.

The battery life isone year.

12. Safety precautions

Operating in the motorrotation is strictly prohibited when pulling the serious clutch handle, so as to avoid wear motor parts.

®. Operate Controller handle when the action shou1d be gentle, remember to controller. force too much to avoid damage to the use of wheelchairs, such as pack 1 oads or

③.Do not exceed the limits of the other vehicles towed.

(4). Do not arbi trari ly disassemble the controller and electric mechanism,

11.Service life

if there is a problem, please find a professionalrepair.

⑤.When using the wheelchair to fasten the seat belt, as far as possib 1 e to maintain a uniform speed, do not drive on the sloping road, so as not to cause the wheelchair to roll over.

⑥.During use, do not stand on the pedals to prevent the wheelchair from tipping.

©. Always check the performance of the brake to ensure its safety and reliability, if necessary, entrust professional maintenance or adjustment.

®. This product can only carry one person, many peop 1 e and the user quality of more than 100 kg personnel shal 1 not use.

⑨.If the wheelchair breaks down or is damaged, it must be repaired by a back to the manufacturer to deal with, or in professional or sent back to the manufacturer for repair.

®. Over the life of the battery can not be used normal ly should be sent the purchase of new batteries returned to the old battery, strictly prohibited seif-treatment, so as not to pollute the environment.

®. No driving in the motor vehicle lane.

®. It's forbidden to alter wheelchairs.

13. Contraindication

®. Persons with corrected vision less than 0.6 are prohibited.

®. Should not be used in patients with upper limb mutilation or behavior disorder.

③.Not For children or pregnant women.

14. Transportation and storage

Electric wheelchairs should be stored in dry, well-ventilated, environment temperature in-20 ° C、 + 55 ° C, relative humidity not more than 90% , indoor should avoid strong sunlight, no corrosive substances around.

Packaged Electric wheelchairs can be transported by ordinary means of transport, the transport shou1d avoid rain and snow splash and mechanical col1ision, not with corrosive materials mixed.

15. Quality Assurance instructions

①.Free maintenance service will be provided within one year after purchase of this product.

®. One of the following situations is not covered by free maintenance:

a) Failure to use as specified in the instruction manual, damage caused by improper maintenance and storage.

b) Failure or damage caused by self-assembly, disassemb1y and repair

c) Other accidental or man-made damage.

Please show the purchase certificate and Warranty Card before repair. If the procedure is not complete, the company refuses to repair.

®. After the product warranty period, the company still for your free service, maintenance only charge for replacement parts.

⑤.If the user requests, the company can provide the circuit diagram, the list of components and other maintenance equipment required information for professionals to repair equipment for reference.

16. List of critical and vulnerable parts

Serial number	Name	Specifications	Quantity
1	Direct current motor	24V、250W	2

2	Control1 er		50A	1
3	Storage battery		12Ah	2
4	Fuse		0. 5A	1
5	Tires	WT-100W	406mm;254mm	Two each
		WT-100WA	406mm;254mm	Two each
		WT-100WB	559mm;254mm	Two each

17. Electromagnetic compatibi1ity statement

This product has passed the electromagnetic compatibi1ity test, to meet the YY 0505 standard of medical devices and equ i pment restrict ions. These restrictions provide reasonab1e protection against harmful interference in typical medical instai 1 ations.

®. Product composition (electrical control system)

Serial number	Part Name	Model Spec if icat ion
1	Direct current motor	EC82N245325A
2	Storage battery	50A
3	Controller	50A

②.Product cable

Serial number	Cable Name	Spec i f i cat i ons	Whether or not to block
1	Power Cord	0.7 5mm2	No

③.EMC performance

The equipment may be subject to radio frequency interference caused by other medical equipment and radio communication. In order to prevent such interference, the product has been tested according to YY 0505-2012 and its requirements have been met. However, the company does not guarantee that there will be no interference in the individual installation environment. If the equipment is found to be subject to interference (which can be determined by turning i t on and off) , the user (or qual if ied maintenance person) shal 1 attempt to take one or more of the following measures to resolve the interference:

a) To adjust the direction or position of the emitting device;
b) Increase the distance between the device and the emitting impact device;
c) Supply power to the equipment from a power source other than that used to affect the equipment;
d) Consult with the supplier or service representative for additional advice.

The manufacturer shall not be liable for any interference caused by:

a) UseInterconnection cables other than those recommended.

b) Unauthorized alteration or modification of the equipment, unauthorized alteration or modification may result in the user's right to operate the equipment in urban areas.

All types of electronic equipment may cause electromagnetic interference to other equipment through air or other cables connected to it. The term EMC (Electromagnetic compatibi1ity) refers to a device that is immune to electromagnetic interference from other devices and that does not affect the ability of other devices to emit similar electromagnetic radiation.

If the required EMC performance is not fully achieved, the user shall install the product according to the steps described in the instruction manual. If there is any problem related to EMC, please contact the Repairman.

(4). Points for attention in product installation

1) Use The power cord provided or specif ied by the company. Products with power plugs should be plugged into a

fixed power outlet with a protective grounding. Do not use any type of adapter or converter (such as " three to two" converter) to connect the power plug.

2) Keep this device as far away from other electronic devices as possible.

3) Make sure to use the power cord provided or specified by the company.

4) Fol low the steps to connect the power cord.

General points to note

1) Specif ies a power cord that can be connected to this product.

The application of the power cord provided by the company will not damage the EMC performance of the product. If the power cord is not specified, the EMC performance of the equipment may be significantly reduced.

2) Points to note when user modification is prohibited

Users are not allowed to modify this product, otherwise the EMC performance of this product may be reduced.

Product modifications include the following changes:

a) Power Cord (length, material, wiring, etc.);

b) Equipment Installation/layout;

c) Equipment conf iguration/components ;

d) Equipment Protection Parts (cover opening/closing and cover fixing parts).

3) Al l covers should be closed when operating the equipment. If for some reason the cover i s not closed, be sure to shut down the system before st ar ting/continuing operations.

4) The operating system may affect the EMC performance of the system with the cover open.

Electric wheelchairs are expected to be used in the following specified electromagnetic environment, and the purchaser and user of electric wheelchairs shall ensure that it is used in such electromagnetic environment.

Table 1

Guide and manufacturer's statement on electromagnetic emission		
Electric whee1chairs are expected to be used in the following specified electromagnetic environment, the purchaser or user of electric wheelchairs shal 1 guarantee that it is used in such electromagnet ic environment:		
Launch Test	Coincidence	Guide to electromagnetic environment
GB 4824 RF Emission	Group 1	Electric wheelchairs use RF energy only for their internal functions. As a result, its RF emissions are low and may not interfere with nearby electronics.
GB 4824 RF Emission	Class B	Electric wheelchairs are suitable for use in al 1 instailat ions, both domest ic and directly connected to the residential pub 1ic low-voltage power grid fo domestic use.
GB 17625.1 Harmonic emission	Class A	
GB 17625. 1 Voltage fluctuation / scintillation emission	It fits	

Table 2 : Guidance and manufacturer* s statement-electromagnetic immunity-al1 ME devices and ME systems

Immunity test	Gb9706Test level	Coincidence level	Electromagnetic
Electrostatic discharge GB/T 17626.2	±6KV Contact discharge ±8KV Air Discharge	±6KV Contact discharge ±8KV Air Discharge	The floor shall be of wood, concrete or ceramic tile, and if the floor is covered with a synthetic material, the relative humidity shall be at least 30%
Electric fast transient pulse group GB/T 17626. 4	±2KV Power Cord	±2KV Power Cord	Network power should have the quality typical of a commercial or hospital environment
Swells GB/T 17626. 5	±1KV Line to line ±2KV Line to ground	±1KV Line to line Not Applicable	Network power should have the quality typical of a commercial or hospital environment
Voltage sags, short interruptions, and vollage variations on the power input 1ines GB/T 17626.11	<5% UT, 0. 5cyc 1 e (on UT, > 95% pause) 40% UT, 5 eye 1 e (on UT,60% pause) 70% UT, 25 cycle (on UT,30% pause) 小于 5% UT, 5s (on UT, >95% pause)	<5% UT, 0. 5cycle (on UT, > 95% pause) 40% UT, 5 eye 1 e (on UT,60% pause) 70% UT, 25 cycle (on UT,30% pause) 小于 5% UT, 5s (on UT, >95% pause)	Network power should have the quality typical of a commercial or hospital environment
Power Frequency magnetic field (50HZ/60HZ) GB/T 17626.8	3 A/m	3 A/m	The power frequency magnetic field should have the power frequency magnetic field level characteristic of the typical place in the typical commercial or hospital environment
Note: Ut refers to the AC network voltage before the test voltage is applied			

Table 3: guidelines and manufacturer declarations~e 1 ectromagnetic immunity-for non-life-supporting ME devices and ME systems

Guide and manufacturer * s statement-electromagnetic immunity			
Electric wheelchairs are expected to be used in the following specified electromagnetic environment, the purchaser or user shall ensure that it is used in this electromagnetic environment.			
Immunity test	GB 9706 Experimental level	Level of conformity	Electromagnetic ENVIRONMENT-A guide
Conducted Radio Frequency GB/T 17626.6	3Vrms 150KHz"80MHz	3V	
Radiation Frequency GB/T 17626.3	3V/m 80MHz~2.5Ghz	3V/m	Portable and Mobile Radio Communicat ion Equipment shal1 not be used closer to any part of the electric wheelchair than the recommended isolation di stance, including cables. The distance should be calculated due to a formula corresponding to the transmi tter frequency. RECOMMENDED SEPARATION DISTANCE: d=l. 2 150 kHz to 80 MHZ; d=l. 2 80MHz to 800MHz; d=2. 3 800 MHZ to 2. 5GHz In the equation* p----- The transmitter manufacturer provides the maximum rated output power of the transmitter in Watts (w) and d-recommended isolation distance in meters (m). The field strength of a stat ionary RF engine is determined by surveying the Electromagnetic Field A, B should be 1ower than the coinc idence level in each frequency range. Interference may occur near devices marked with the following symbols.
Note 1: At 80MH and 800mhz frequency points, the formula for the higher frequency band is used. Note 2 : These guide 1 ines may not be appropriate in all cases. Electromagnetic propagation is affected by the absorption and reflection of bui ldings, objects and the human body.			
A the field strength of fixed transmitters such as base stations for wireless (cellular/cordless) telephone and terrestrial mobi1e radio, amateur radio, am and FM radio and television broadcasting can not be predicted accurately in theory, in order to evaluate the electromagnetic environment of the fixed RF transmitter, the electromagnetic field survey shou1d be considered. If the measured equipment or system is located in a location where the field strength is higher than the RF compliance level used above, the equipment or system shal1 be observed to verify its normal operation. If abnormal performance is observed, additional measures may be necessary, such as reorienting or repositioning the device or system. B in the 150kHz ' 80MHz frequency range, the field strength should be less than 3v/m.			

Table 4: RECOMMENDED ISOLATION DISTANCE BETWEEN PORTABLE AND MOBILE RADIO FREQUENCY COMMUNICATION DEVICES and devices or systems-for non-life-supporting ME devices and ME systems

RECOMMENDED ISOLATION DISTANCE BETWEEN PORTABLE AND MOBILE RADIO FREQUENCY COMMUNICATION EQUIPMENT AND KD-901E high voltage potential therapeutic apparatus			
Electric wheelchairs are expected to be used in an electromagnet ic environment where RF radiation di sturbance is control led. Depending on the maximum amount communication equipment and the power output, the purchaser or user can maintain portable and mobile radio f requency communication through the followin recommendat ions, the min imum distance between the device and the electric whee1chair to prevent electromagnetic interference.			
Max. Rated output power W of transmitter	Isolation Distance / M for different frequency of transmitter		
	150 kHz to 80 MHZ 1. 2x/P	80 kHz to 800 MHZ 1. 2VF	800 kHz to 2. 5 Ghz 2. 3VP
0. 01	0. 12	0. 12	0. 23
0. 1	0. 38	0. 38	0. 73
1	1. 2	1. 2	2. 3
10	3. 8	3. 8	7. 3
100	12	12	23
For the transmitter* s maximum rated output power not listed in the table above, it is recommended that the isolation distance D, in meters (m) , be determined by the formula in the corresponding transmitter frequency column, here P is the maximum rated output power of the transmitter supplied by the transmitter manufacturer, in Watts (W). Note 1: At 80mh and 800mhz frequency points, the formula for the higher frequency band is used. Note 2 : These guidel ines may not be appropriate in all cases. Electromagnetic propagation is affected by the absorption and reflection of buildings, objects and the human body.			

Table 5:Function defined as basic performance, no component damage.

Assemb 1 y and commissioning of whee chchair

1、 The product packing box contains a car bod a storage battery, a pair of legs, a charger.

2^ Press down hard with both hands unti 1 the vehicle is fully open (see figure).

3^ Position one end of the controller holder ■ on the right handrai 1 of the vehic 1 e with the lower end of the controller holder, adjust the control 1 er to then lock the screw. Push back the power cord to a straight line, (see photo)

5^ Insert the straddle into the frame mounting Chute (fig.)

6^ Hold the handlebars in both hands and raise them up until the backrest is fully extended. Make sure that the spring pin

is inserted into the holes of the handlebars (as shown) to ensure safe use.

7 、 Use of clutch

When the electric whee 1 chair breaks down or the battery runs out, switch the wheelchair to manual mode and push i t to a safe area :

©E1 ectr ic mode to manual mode : pull the clutch handle out of the left and right wheels and rotate the hand 1 e so that the limit block is stuck on the flat track (as shown).

©MANUAL MODE TO ELECTRIC MODE : turn the clutch handle of the left and right wheels. The limit blocks slide on the plane track and spring into the groove automatically. (see photo)

8、Back folding

Pull the knuckle wrench (shown) on both sides of the backrest down and fold the backrest down. Hold the hand 1 e tube and lift the sleeve up. When you hear a "click" on both sides of the handle tube, the back of the hand 1 e is folded.

9^ As shown in figure 9

When the two fixing screws of the handbrake are re 1 axed, the tightness of the handbrake and the angle of the hand 1 e can be adjusted to the ideal position to tighten the screw to fix the handbrake (figure).

10^ chargers and batteries

Just follow the procedures below to complete the charge

Step 1 : Check the charger socket to make sure i t i s not blocked.

Step 2: Make sure the wheelchair switch i s off.

Step 3: Plug the charger* s output into a slot be 1ow the control1 er.

Step 4: When the charger is green, the battery is charged, the charger* s output

Step 5: pull plug from the slot above the battery case.

After recharging, the charger is connected to the hot spot and can be charged for up to 24 hours, which ensures that the battery is fully charged. When the charger is disconnected, remember to unplug the wires connected to the control 1 er so that the power is not lost. When the wheelchair is not in use, please charge it once a month in case the battery life is shortened.

After Service Card

Distributor:			
CARDHOLDER:	Telephone number:		Model number:
Address:			Factory date:
Height:	Weight:	Controller location:	Factory Code:

Quality Warranty:

The products you purchase can enjoy the following maintenance services : 1. Motor, control l er push rod and frame warranty period of one year; in the warranty period, free maintenance. 2. Life-1ong maintenance services, door-to-door maintenance needs to be charged, according to the near and far cos separately.

Service record	Time	Content

Note, i: if y our contact informat ion has changed, p lease inform US immediately!

2 : The Replacement Parts Belong to the company :

3 : Batteries, tires, handrails and other vulnerable part s are not covered by the warranty ;

Packing list

Articles	Quantity
Wheelchair model	one
Chargers	one
After Service Card	one
Battery box	one
Straddle foot	two

May Happy always in your life

Thank you